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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,747	11/18/2003	Kenneth J. Kirchhoff	59137US002	5513
32692	7590	01/05/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			CHANG, YEAN HSI	
			ART UNIT	PAPER NUMBER
			2835	

DATE MAILED: 01/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/715,747	<b>Applicant(s)</b> KIRCHHOFF, KENNETH J.	
	<b>Examiner</b> Yean-Hsi Chang	<b>Art Unit</b> 2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Terminal Disclaimer***

1. The terminal disclaimer filed on 11/29/05 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of copending application 10/715,637 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Claim Objections***

2. Claims 1-2 and 18 are objected to because of the following informalities: The term "a top and bottom surface" in claims 1 and 18 is not defined if it does not mean two surfaces; "the bottom surface" and "the arm axis" in claims 1 and 18 lack antecedent bases; and the relationship between the "first and second arms" in claim 2 and the "at least one arm" in claim 1 needs to be defined. Appropriate correction is required.

3. The following rejections are based on the Examiner's best understanding.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-12, 15 and 18-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Hagglund et al. (US 6,536,728 B1).

The applied reference has a common assignee and an inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Hagglund teaches an adjustable keyboard support assembly (fig. 1) securable to a mounting surface (20), comprising: at least one arm (for example, 18 or 16) having a first end (near 52, fig. 3) and a second end (opposite to first end) and a top and bottom surfaces (shown in fig. 3, not labeled), a keyboard tray (14) attached to the first end of the at least one arm at a front attachment point (shown in fig. 1), at least one rail (74) engaged with the second end of the at least one arm (shown in fig. 1) at a rear pivot point (81), wherein the rear pivot point is able to be translated in a generally linear direction along the rail (see col. 7, lines 63-67), a first arm axis extending between the front attachment point and rear pivot point (may be seen in fig. 3, not labeled), a

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positioning surface (bottom surface of 18, fig. 3) disposed along the bottom surface of the second end of each arm, at least one L-shaped positioning mechanism (84) fixed in relation to the mounting surface and disposed so as to engage the positioning surface (shown in fig. 1), an arm positioning dimension (not labeled) defined in a generally vertical direction between the first arm axis and the positioning mechanism, and wherein the arm positioning dimension increases from the portion of the positioning surface most distal from the rear pivot point to the portion of the positioning surface most proximate to the rear pivot point (better shown in fig. 3) (claims 1, and 18); the at least one arm comprising first and second arms substantially mirrored in construction pivotally attached to opposite sides of the keyboard tray (shown in fig. 1), and two rails substantially mirrored in construction, wherein each rail is slideably engaged with the second end of one of the first and second arms (also shown in fig. 1) (claims 2 and 18); a support member (48) having opposite first and second ends (50 and 52) wherein the first end is attached to the first arm and the second end is attached to the second arm (shown in fig. 3), wherein the front attachment point of the first arm and the front attachment point of the second arm allow pivoting of the keyboard tray with respect to the first arm and the second arm at a point where each arm and the keyboard tray are in supportive engagement (shown in fig. 4) (claim 3); wherein the keyboard tray further comprises: a locking device (60) adapted to be engaged to inhibit rotation of the keyboard tray relative to the first arm and second arm and to be disengaged to allow relatively free rotation of the keyboard tray relative to the first arm and second arm (claim 4); wherein the locking device comprises: a handle (61) extending from a bottom

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side of the keyboard tray (shown in figs. 4 and 5), wherein rotation of the keyboard platform relative to the first arm and the second arm and rotation of the handle in a second direction loosens the locking device to allow relatively free rotation of the keyboard tray relative to the first arm and the second arm (see col. 4, lines 40-61) (claim 5); wherein the locking device further comprises a top clamp plate (62) on one side of the support member, a bottom clamp plate (63) on the opposite side of the support member, a screw (64), and a nut (65), wherein the screw and nut moveably attach the handle to the top and bottom clamp plates (see col. 4, lines 40-61) (claim 6); at least one notch (82) disposed in the positioning surface (fig. 6a) (claim 7); four notches disposed in the positioning surface (fig. 6a), wherein the notches are substantially equally spaced (fig. 6a) (claim 8); wherein the positioning surface is shaped such that translating the second portion of the side arm a horizontal distance within the rail, results in translation of the keyboard tray a vertical distance (the arm positioning dimension increases from the portion of the positioning surface most distal from the rear pivot point to the portion of the positioning surface most proximate to the rear pivot point as stated above and shown in fig. 3), wherein the relationship between the translated horizontal distance and the resulting vertical distance is linear (the positioning surface is substantially flat between the point near 52 and the notch as shown in fig. 3) (claims 9, 11 and 18); four notches disposed in the positioning surface, wherein the notches are substantially equally spaced (shown in fig. 3) (claims 10-11 and 19); and at least one mating mechanism for releasably preventing relative movement between the positioning surface and the positioning mechanism (62 and 88, see col. 6, lines 39-41) (claim 15).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 13-14 and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hagglund et al.

Hagglund teaches an adjustable keyboard support assembly comprising in addition to the features stated in section 6, hereinabove: a plurality of notches shaped for positive engagement (shown in figs. 4 and 6). Hagglund fails to teach the notches disposed in the positioning surface at decreasing intervals, and wherein the notches are spaced from each other such that translating the second portion of the side arm a horizontal distance between each notch results in a translation of the keyboard tray vertical distance, and the relationship between the horizontal distance and the resulting vertical distance is linear. It would have been an obvious matter of design choice to one having ordinary skill in the art to modify the device of Hagglund by positioning the notches at decreasing intervals such that the relationship of the translation in a horizontal distance and the elevation of the keyboard in a vertical direction being linear, since such a modification would have involved a mere change in the size between

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notches. A change in size is generally recognized as being within the level of ordinary skill in the art. MPEP §2144.04, IV A.

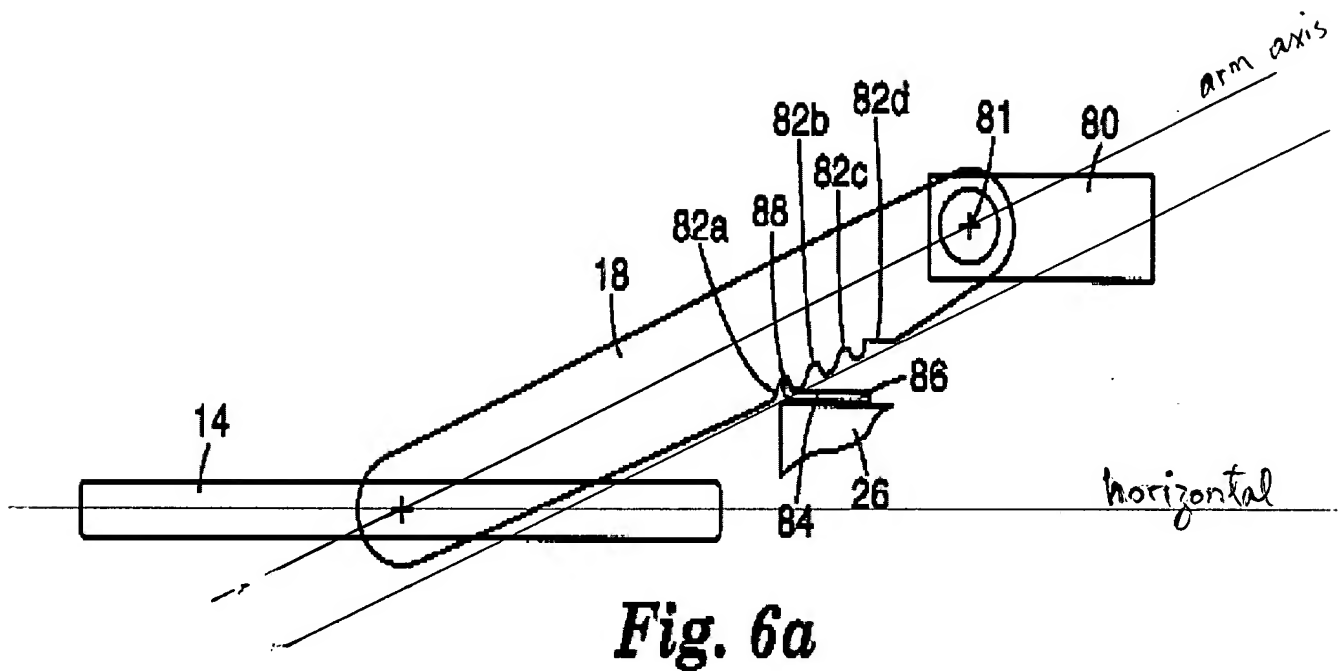
### ***Response to Arguments***

8. Applicant's arguments filed 11/29/05 have been fully considered but they are not persuasive.

Regarding claims 1 and 18, Applicant argues, "Looking specifically at Figure 6a, if one were to draw an imaginary arm axis from the pivot point 8(1) to the point where arm 18 connects with keyboard tray 14, that imaginary line would be an arm axis. If one were to measure the vertical distance between notches 82a, 82b, 82c, and 82d and the imaginary arm axis, it would be all of the same height.", "the arm design of the '728 patent does not use a non-uniform arm, as Applicant has used in the instant application.", and "Furthermore, the '728 patent does not suggest the use of an arm design where the vertical distance between the notch and the imaginary arm axis increases."

As instructed by the Applicant, an imaginary arm axis is drawn in red in Fig. 6a of Hagglund as attached below, and a line parallel to the axis is also drawn in the Figure. It is clearly shown that the arm design of '728 patent does use a non-uniform arm (from 10.5 mm at the pivot point to 12.5 mm at the notches). The vertical distance between a notch and the imaginary arm axis varies as the arm rotates even though the distances between the notches and the imaginary arm axis are equal.





**Conclusion**

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Correspondence***

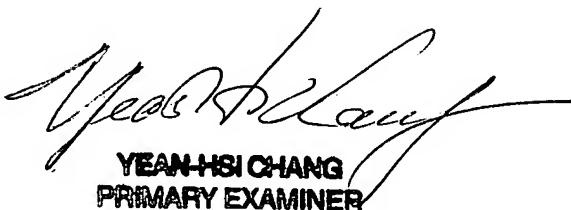
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yean-Hsi Chang whose telephone number is (571) 272-2038. The examiner can normally be reached on 07:30 - 16:00, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the Art Unit phone number is (571) 272-2800, ext. 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-8558.

Yean-Hsi Chang  
Primary Examiner  
Art Unit: 2835  
January 3, 2006



**YEAN-HSI CHANG**  
**PRIMARY EXAMINER**